Sheldrake, Sean

From: Sheldrake, Sean

Sent: Monday, February 08, 2016 11:02 AM

To: 'McClure Tosch'

Cc: Rose Longoria; Laura Shira; callie@ridolfi.com; Lance Peterson; Elena Ramirez

Subject: RE: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site Attachments: RE: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

McClure,

Thank you for the Yakama's review of the DTS data; we'll incorporate your comments and/or let you know if we have any questions or concerns.

Thanks again.

S

Sean Sheldrake, Unit Diving Officer, RPM EPA Region 10, 1200 Sixth Ave., Suite 900; Mailstop DOC-01 Seattle, WA 98101 206.553.1220 desk 206.225.6528 cell

http://yosemite.epa.gov/r10/cleanup.nsf/sites/ptldharbor

http://www.epa.gov/region10/dive/

206.553.6379 Dive Operations Center

206.369.7500 Dive Unit cell

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From: McClure Tosch [mailto:tosm@yakamafish-nsn.gov]

Sent: Friday, February 05, 2016 2:06 PM

To: Sheldrake, Sean <sheldrake.sean@epa.gov>

Cc: Rose Longoria <lonr@yakamafish-nsn.gov>; Laura Shira <shil@yakamafish-nsn.gov>; callie@ridolfi.com; Lance Peterson <PetersonLE@cdmsmith.com>;

Elena Ramirez <elena@ridolfi.com>

Subject: RE: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

Hi Sean,

Please see the attached comments regarding the detection of the Groundwater Seepage Report for Gasco.

From: Sheldrake, Sean [mailto:sheldrake.sean@epa.gov]

Sent: Wednesday, January 20, 2016 10:26 AM

To: tosm@yakamafish-nsn.gov

Cc: Rose Longoria < lonr@yakamafish-nsn.gov >; callie@ridolfi.com; Lance Peterson < PetersonLE@cdmsmith.com >

Subject: RE: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

That works McClure—Thank you. S

Sean Sheldrake, Unit Diving Officer, RPM

EPA Region 10, 1200 Sixth Ave., Suite 900; Mailstop DOC-01

Seattle, WA 98101 206.553.1220 desk 206.225.6528 cell

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From: McClure Tosch [mailto:tosm@yakamafish-nsn.gov]

Sent: Wednesday, January 20, 2016 8:00 AM
To: Sheldrake, Sean < sheldrake.sean@epa.gov>

Cc: Rose Longoria < ! Laura Shira < ! callie@ridolfi.com; Lance Peterson < PetersonLE@cdmsmith.com>

Subject: RE: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

Hi Sean,

Can we make the due date February 7th?

From: Sheldrake, Sean [mailto:sheldrake.sean@epa.gov]

Sent: Tuesday, January 19, 2016 2:20 PM

To: tosm@yakamafish-nsn.gov

Cc: Rose Longoria < ! Laura Shira < ! callie@ridolfi.com; Lance Peterson (PetersonLe@cdmsmith.com)

<PetersonLE@cdmsmith.com>

Subject: RE: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

McClure, will 2 or 3 weeks work for your team?

Thank you.

Sean Sheldrake, Unit Diving Officer, RPM EPA Region 10, 1200 Sixth Ave., Suite 900; Mailstop DOC-01 Seattle, WA 98101 206.553.1220 desk 206.225.6528 cell

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From: McClure Tosch [mailto:tosm@yakamafish-nsn.gov]

Sent: Friday, January 15, 2016 3:57 PM

To: Sheldrake, Sean <sheldrake.sean@epa.gov>

Cc: Rose Longoria < lonr@yakamafish-nsn.gov>; Laura Shira < shil@yakamafish-nsn.gov>; callie@ridolfi.com

Subject: RE: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

Hi Sean,

I will work with Ridolfi on a review time line for this. Do you guys have a date you are shooting for?

Thanks,

McClure

From: Sheldrake, Sean [mailto:sheldrake.sean@epa.gov]

Sent: Thursday, January 7, 2016 9:22 AM

To: Alex Liverman (liverman.alex@deq.state.or.us) < liverman.alex@deq.state.or.us; Allen, Elizabeth < allen.elizabeth@epa.gov); audiehuber@ctuir.com; bayuk.dana@deq.state.or.us; schwarz.bob@deq.state.or.us; bob@ridolfi.com; brandy.humphreys@grandronde.org; callie@ridolfi.com; Christopher, Anne < christopher.Anne@epa.gov; coffeyse@cdm.com; Conley, Alanna < conley.alanna@epa.gov; Cora, Lori < courtney@crag.org; Courtney@crag.org>; cunninghame@gorge.net; Dan Hafley (HAFLEY.Dan@deq.state.or.us) < HAFLEY.Dan@deq.state.or.us>; Charters, David < charters.DavidW@epa.gov; Ebright, Stephanie < EBRIGHT.STEPHANIE@EPA.GOV; Fuentes, Rene < fuentes.rene@epa.gov; Gail Fricano (gfricano@indecon.com) < gfricano@indecon.com); Genevieve Angle@noaa.gov) < Genevieve.Angle@noaa.gov); Gustavson, Karl < Gustavson, Karl < Gustavson, Holly.Partridge@grandronde.org); Holly.Partridge@grandronde.org); Holly.Partridge@grandronde.org); Holly.Partridge@grandronde.org); Jeremy Buck@fws.gov; johnson.keith@deq.state.or.us; jweis@hk-law.com; Kristin Callahan < kristine.com); Laura Klasner Shira

<shil@yakamafish-nsn.gov; mcclincy.matt@deq.state.or.us; tosm@yakamafish-nsn.gov; Michael.karnosh@grandronde.org;</p>
peterson.Jennifer@deq.state.or.us; poulsen.mike@deq.state.or.us; Rachel DelVecchio (rdelvecchio@indecon.com) <redelvecchio@indecon.com); Rita Cabral (rcabral@indecon.com) <redelvecchio@indecon.com); Robert.Neely@noaa.gov; Robinson, Deborah <redelvecchio@indecon.com); ROICK.Tom@deq.state.or.us;</p>
rose@yakamafish-nsn.gov; Sarah Greenfield (Greenfield.Sarah@deq.state.or.us) < Greenfield.Sarah@deq.state.or.us>; ted buerger@fws.gov; tomd@ctsi.nsn.us
Subject: FW: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

Hello everyone,

Please see the attached DTS report for the demonstration being conducted at Gasco to evaluate this technology's ability to determine areas of groundwater flux. If you are interested in commenting do let me know and we can work towards a mutually agreeable goal to compile your comments into the EPA set.

Thank you.

S

Sean Sheldrake, Unit Diving Officer, RPM EPA Region 10, 1200 Sixth Ave., Suite 900; Mailstop DOC-01 Seattle, WA 98101 206.553.1220 desk 206.225.6528 cell

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From: Jen Woronets [mailto:jworonets@anchorgea.com]

Sent: Wednesday, January 06, 2016 2:01 PM **To:** Sheldrake, Sean <sheldrake.sean@epa.gov>

Cc: Jen Woronets <<u>iworonets@anchorqea.com</u>>; Lance Peterson (<u>PetersonLE@cdmsmith.com</u>) <<u>PetersonLE@cdmsmith.com</u>>; Koch, Kristine <<u>Koch.Kristine@epa.gov</u>>; Patty Dost <<u>pdost@pearllegalgroup.com</u>>; Sarah Riddle <<u>sriddle@pearllegalgroup.com</u>>; Bob Wyatt <<u>rjw@nwnatural.com</u>>; Ryan Barth <<u>rbarth@anchorqea.com</u>>; Carl Stivers <<u>cstivers@anchorqea.com</u>>; Ben Hung <<u>bhung@anchorqea.com</u>>; Ben Johnson <<u>bjohnson@anchorqea.com</u>>; John Edwards <<u>jedwards@anchorqea.com</u>>; Rick Schwarz <<u>rschwarz@anchorqea.com</u>>; Myron Burr (<u>myron.burr@siltronic.com</u>) <<u>myron.burr@siltronic.com</u>>; Ilene Gaekwad (<u>igaekwad@davisrothwell.com</u>) <<u>igaekwad@davisrothwell.com</u>>; Dana Bayuk <<u>BAYUK.Dana@deq.state.or.us</u>>
Subject: Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site

Sean -

Attached for your review please find the Distributed Temperature Sensing for the Detection of Groundwater Seepage Report for the Gasco Sediments Site (Site). The report presents the results of a focused groundwater seepage investigation completed voluntarily by NW Natural in 2015 at a portion of the Site. The investigation consisted of three phases of data collection that were performed in accordance with the USEPA-approved Gasco Sediments Site – Distributed Temperature Sensing Work Plan and in coordination with EPA and DEQ. As discussed during NW Natural's groundwater seepage control presentation to EPA on September 21, 2015, the results provide another line of evidence that offshore groundwater seepage is controlled at the Site via operation of the upland hydraulic control & containment groundwater source control system.

Please let us know if you have any questions on the report or would like to further discuss the findings in a call or meeting. Thanks and happy new year.

Thank you, Jen Woronets ☺ Anchor QEA, LLC jworonets@anchorqea.com 421 SW Sixth Avenue, Suite 750 Portland, OR 97204 503-972-5014

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